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WHIRLPOOL PATENTS COMPANY-MD 0750
Suite 102
500 Renaissance Drive
St. Joseph, MI 49085

EXAMINER

WALDBAUM, SAMUEL A

ART UNIT	PAPER NUMBER
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1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/823,228	Applicant(s) LUCKMAN ET AL.	
	Examiner SAMUEL A. WALDBAUM	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28,29,31 and 33-64 is/are pending in the application.
- 4a) Of the above claim(s) 35,49 and 57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28,29,31,33,34,36-48,50-56 and 58-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In the reply filed June 26, 2008, the applicant amended claims 28, 33, 41 and 42 and cancelled claims 30 and 32. The applicant further added claims 43-64.

Election/Restrictions

2. Claims 49 and 57 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected dishwasher species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 2, 2007. In this reply the applicant elected to pursue the species of a washing machine without traverse, therefore since these newly added claims fall under the non-elected species they are withdrawn from consideration.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claim 28 (oxidation reduction potential sensor), claims 44, 51 and 59 (the pump), claims 48 (the centrifugal switch), claims 42, 50 and 58 (chemical concentration sensor) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 50 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 50 depends directly off claim 41 which requires a chemical concentration sensor in that last limitation.

5. Claim 62 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 62 requires a fluid conditioning devices which depends off claim 42 which requires a fluid conditioning device in the last limitation, therefore claim 62 does not further limit claim 42.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claim 48 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 48 requires a centrifugal switch which is indefinite on how that effects the activation of the oxidizing agent. This claim is being interpreted as a on/off switch for the device.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 28, 29, 33, 34, 36-37, 39-40, 44 and 48 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. ppub. 2002/0166177, hereafter `177) in view of Pastryk et al (U.S. 5,345,637, hereafter `637) and Rothgeb et al (U.S. ppub. 2003/0227394, hereafter 394).

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11. Claim 28: `177 teaches a wash zone (fig. 1 part 15, [0016]) a water supply line (fig. 1, [0020]), a hydrogen peroxide generator, hence an chemical oxidizing generator (fig. 1, part 110, [0020]) and a conduit leading from the generator to the wash zone (fig. 1, part 120, [0020]-[0023]). `177 does not disclose the dispenser or a sump in the washing machine or a oxidation reduction potential sensor. `637 is a washing machine. `637 teaches a sump (fig. 2, part 50) and fluid dispensers (fig. 1, parts 86 and the end of conduit 48). These are standard components on a washing machine. All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, meaning that the fluid dispensers and sump taught by `637 in apparatus `177 to yield the predictable result of dispensing the incoming fluid and collecting the fluid from the wash tub.

`394 is solving the same problem as the applicant of determining the characteristics of a liquid medium. `394 teaches the use of a oxidation reduction potential sensor to determine the physical/chemical characteristics of a liquid medium ([0051]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a oxidation-reduction potential sensor in apparatus `177 in view of `637 to determine the physical/chemical characteristics of the liquid medium.

12. Claim 29: Claims directed to apparatus must be distinguished from prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA). “[A]pparatus claims cover what a devices is not what a device does” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), meaning

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what items `177 is washing is not relevant as long as `177 is capable of washing fabrics ([0015]-[0017]).

13. Claim 30: `177 teaches a agitation means (fig. 1, part 17, [0016]).

14. Claim 32: `177 teaches that the basket and agitator are rotatable ([0016] hence it impart mechanical energy on the load).

15. Claim 33: `177 does not teach a heater. `637 teaches a heater in a conduit or a sump (col. 5, lines 1-25) to increase temperature in washing fluid (col. 5, lines 1-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a heater as taught by `637 in apparatus `177 to have raised the temperature of the washing fluid.

Claims directed to apparatus must be distinguished from prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA). “[A]pparatus claims cover what a devices is not what a device does” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), means as to when the oxidizing agent is added as described by `177 does not structural limitation, since it is limitation as to what something is doing.

16. Claim 34: `177 teaches that the agent flows in to the basket (fig. 1, part 120, [0020]-[0023]). `177 does not teach the location where the pipe enters the washing chamber, but that the oxidizing agent interacts with the laundry ([0024]). All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, meaning that the

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dispensing of the bleach can be dispense in the lower region of the wash zone, to yield the predictable result of the bleach/oxidizing agent to interact with the laundry as taught by `177.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to place the oxidizing dispensing unit in the lower region of the wash zone, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

17. Claims 36 and 37: `177 teaches hydrogen peroxide ([0020]). Claims directed to apparatus must be distinguished from prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA). “[A]pparatus claims cover what a devices is not what a device does” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), meaning the amount of hydrogen peroxide entered in the machine is how the oxide is being used in the wash fluid, as `177 teaches generating hydrogen peroxide.

18. Claims 39 and 40: `177 teaches the use of a electrochemical cell for dissociating water by the means of electrolysis ([0010]-[0012], where voltage is added to the electrochemical cell to create different peroxide concentrations, hence electrolysis is occurring).

19. Claim 44: `637 teaches the use of a pump (part 38, col. 4 lines 5-30).

20. Claim 48: `117 teaches using a switch to turn the oxidation generating device on/off. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the switch can be a centrifugal switch as a means to turn the oxidation generating device on/off.

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Claim 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) as applied to claim 36 above further in view of Scheper et al (U.S. pagpub 2003/0216271, hereafter '271) and De Souza (U.S. pgpub. 2002/0189975, hereafter '975).

'177, '637 and '394 teaches all the limitations of claim 36.

21. Claim 38: '177 teaches chemically treating a surface in the washing machine with a manganese to activate the hydrogen peroxide ([0008], [0024]-[0026]). '177 does not teach that hydroxyl radicals are formed. '271 is solving the same problem as the applicants of decomposing hydrogen peroxide. '271 teaches that iron and manganese decompose hydrogen peroxide ([0174]). '975 is solving the same problem as the applicant as to what hydrogen peroxide decomposes into hydroxyl radicals when interacting with a catalyst. '975 teaches that hydrogen peroxide decomposes into hydroxyl radicals when interacting with iron [0079]. All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, meaning that the surface treatment as taught by '177 where the catalyst is iron as taught by '271 and '975 to yield the predictable result of the hydrogen peroxide decomposing into hydroxyl radicals.

Claims 41 and 50-51 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Jonsson (U.S. 6,578,225, hereafter '225).

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22. Claims 41 and 50-51: See claims 28 and 44 above. `177 further teaches a controller/CPU ([0017]-[0022]) but does not teach that the control in communication with a locking mechanism for the door. `394 teaches the use of sensor to determine the concentration of a liquid medium ([0051]). `225 is a washing machine. `225 teaches using a controller that receives signals from sensors and output signals to a locking mechanism to a door (col. 13, lines 15-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made that that door can be lock in response to a signal from a controller as taught by `225 in apparatus `177 in view of `637 and `394 in response to the controller receiving concentration signals from the sensor.

Claims 42, 43, 58-59 and 62 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Andrews et al (U.S. pgpub 2003/0080467, hereafter `467).

23. Claims 42, 43, 58-59 and 62: See claims 28, 41 and 44 above. `177, `637 and `394 do not teach a fluid conditioning device. `467 is solving the same problem as the applicant of pretreating incoming water before processing. `467 teaches using a filter/fluid conditioning device to pretreat the incoming water to removing any sedimentation [0069]. It would have been obvious to one of ordinary skill in the art to use a filter as taught by `467 to pretreat the water in apparatus `177 in view of `637 and `394 to remove any sedimentation in the water.

Claim 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Scheper et al (U.S. pagpub 2003/0216271) and De Souza (U.S. pgpub.

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2002/0189975) as applied to claim 38 above further in view of Andrews et al (U.S. pgpub. 2003/0080467)

`177, `637, `394 `271 and `975 teaches all the limitations of claim 36.

24. Claim 47: `177, `637, `394 `271 and `975 do not teach that the chemical modified surface comprises titanium dioxide. `467 is solving the same problem as applicant of using a chemical modified surface to created hydroxyl radicals. `467 teaches that titanium dioxide surface can be used as a catalyst for generating hydroxyl radicals ([0005]). The selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used titanium dioxide as taught by `467 in apparatus `177 in view of `637, `394 `271 and `975 to be the catalyst to generate hydroxyl radicals.

Claims 54 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Jonsson (U.S. 6,578,225) as applied to claim 41 above, further in view of Andrews et al (U.S. pgpub 2003/0080467).

`177, `637, `394 and `225 teach all the limitations of claim 41.

25. Claim 54: See claim 42 above.

Claims 55-56 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Jonsson (U.S. 6,578,225) as applied to claim 41 above further in

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view of Scheper et al (U.S. pagpub 2003/0216271) and De Souza (U.S. pagpub. 2002/0189975) and Andrews et al (U.S. pgpub. 2003/0080467)

`177, `637, `394 and `225 teaches all the limitations of claim 36.

26. Claims 55-56: See claims 38 and 47 above.

Claims 63 and 64 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pagpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Andrews et al (U.S. pgpub 2003/0080467)) as applied to claim 42 above further in view of Scheper et al (U.S. pagpub 2003/0216271) and De Souza (U.S. pgpub. 2002/0189975)

`177, `637, `394 and `467 teach all the limitations of claim 42 above.

27. Claims 63 and 64: See claims 38 and 47 above.

Claim 45 and 46 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pagpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) as applied to claim 28 above further in view of Heskett et al (U.S. 3,817,381, hereafter `381).

`177, `637 and `394 teaches all the limitations of claim 28.

28. Claims 45: `177, `637 and `394 do not teach a storage chamber with the chemical generating device. `381 is solving the same problem as the applicant of creating storage space. `381 teaches storage space with the treatment device (col. 4, lines 60-68) to store the needed chemicals to operate the device (col. 4, lines 60-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have placed a storage space as

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taught by `381 in apparatus `177 in view of `637 and `394 to store the chemicals needed to operate the oxidation generating device.

29. Claim 46: The storage space of apparatus `177 in view of `637, `394 and `381 is capable of storing a salt composition and a catalyst.

Claims 52 and 53 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Jonsson (U.S. 6,578,225) as applied to claim 41 above further in view of Heskett et al (U.S. 3,817,381).

`177, `637, `394 and `225 teaches all the limitations of claim 41.

30. Claims 52 and 53: See claims 45 and 46 above.

Claims 60 and 61 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamand (U.S. pgpub. 2002/0166177) in view of Pastryk et al (U.S. 5,345,637) and Rothgeb et al (U.S. pgpub. 2003/0227394) and Andrews et al (U.S. pgpub 2003/0080467)) as applied to claim 42 above further in view of Heskett et al (U.S. 3,817,381).

`177, `637, `394 and `467 teaches all the limitations of claim 42.

31. Claims 60 and 61: See claims 45 and 46 above.

Response to Arguments

32. Applicant's arguments filed June 26, 2008 have been fully considered but they are not persuasive. Since only claim amendments were provided and the newly cited art teaches the newly added limitations.

Conclusion

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL A. WALDBAUM whose telephone number is (571)270-1860. The examiner can normally be reached on M-TR 6:20-3:50, F 6:30-10:30 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A. W./
Examiner, Art Unit 1792

/FRANKIE L. STINSON/
Primary Examiner, Art Unit 1792